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An electronic version of this report is available on the State Center for Health Statistics web site: http://www.schs.state.nc.us/SCHS/pubs.

For more information about the BRFSS, visit the CDC's BRFSS web site: http://www.cdc.gov/brfss. The CDC's *BRFSS At-A-Glance* publication is available at http://www.cdc.gov/nccdphp/publications/AAG/brfss.htm.

Sampling

Household telephone sample frame

Beginning in 2003, the CDC (Centers for Disease Control and Prevention) protocol for selecting household telephone numbers discontinued the inclusion of 0 blocks in the sampling frame; 0 blocks are computer generated listings of 100 consecutive phone numbers that contain *no* published household telephone numbers. Now, only 1+ blocks are sampled; these are also computer generated listings of 100 consecutive phone numbers, but they contain *at least one* published household telephone number. These 1+ blocks are then assigned to two strata: 1) high density or listed numbers and 2) low density or unlisted numbers. The sampling ratio for these two strata is 1.5:1, in which the high density stratum (listed) is sampled at the rate of 1.5 times that of the low density stratum (unlisted). This approach has served to lower cost and improve interviewer efficiency.

At the present time, only households with landline telephones are included in the BRFSS sampling frame. However, because of the increasing number of wireless-only households (cellular, mobile) in the United States, and their potential impact on biasing health estimates if not included (see, *Telephone Coverage and Health Survey Estimates: Evaluating the Need for Concern About Wireless Substitution*, Am J Public Health. 2006;96:926–931), pilot studies are now underway at the CDC and in Washington state to test different approaches to screening and interviewing cell phone users for inclusion in the BRFSS survey.

North Carolina geographic sample frame

In order to provide local-level estimates for the entire state, 37 different geographical strata were formed. These 37 strata were used in the 2004 and 2005 survey designs. Several different approaches were used to form these 37 geographical units. First, 12 new large-population counties were added to the existing group of 10 (state's largest) counties over-sampled in the 2001 survey. These new single-county strata, introduced in 2004, are Alamance, Cabarrus, Catawba, Davidson, Iredell, Johnston, Orange, Pitt, Randolph, Robeson, Rowan, and Union. The original 10 counties are Buncombe, Cumberland, Durham, Forsyth, Gaston, Guilford, Mecklenburg, New Hanover, Onslow, and Wake.

Second, the remaining 78 counties were grouped into 13 clusters or multi-county groups. Population size and geographical contiguity were two primary factors used in determining how to form these multi-county strata. In some cases, counties that share health information were grouped together, e.g., the mountain counties that are served by the Mountain AHEC (Area Health Education Center) regional center. Other counties are grouped together using cluster analysis (SAS Proc Cluster*). In this instance, social and economic information

*SAS/STAT User's Guide, Version 8. SAS Institute Inc., Cary N.C., 1999.